

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P651639

Luminaire Tested: **GALN-SA9D-840-U-T2R**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651639  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA9D-840-U-T2R  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(9) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 60107.9 lumens  
Efficiency: N/A  
Efficacy: 108.9 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

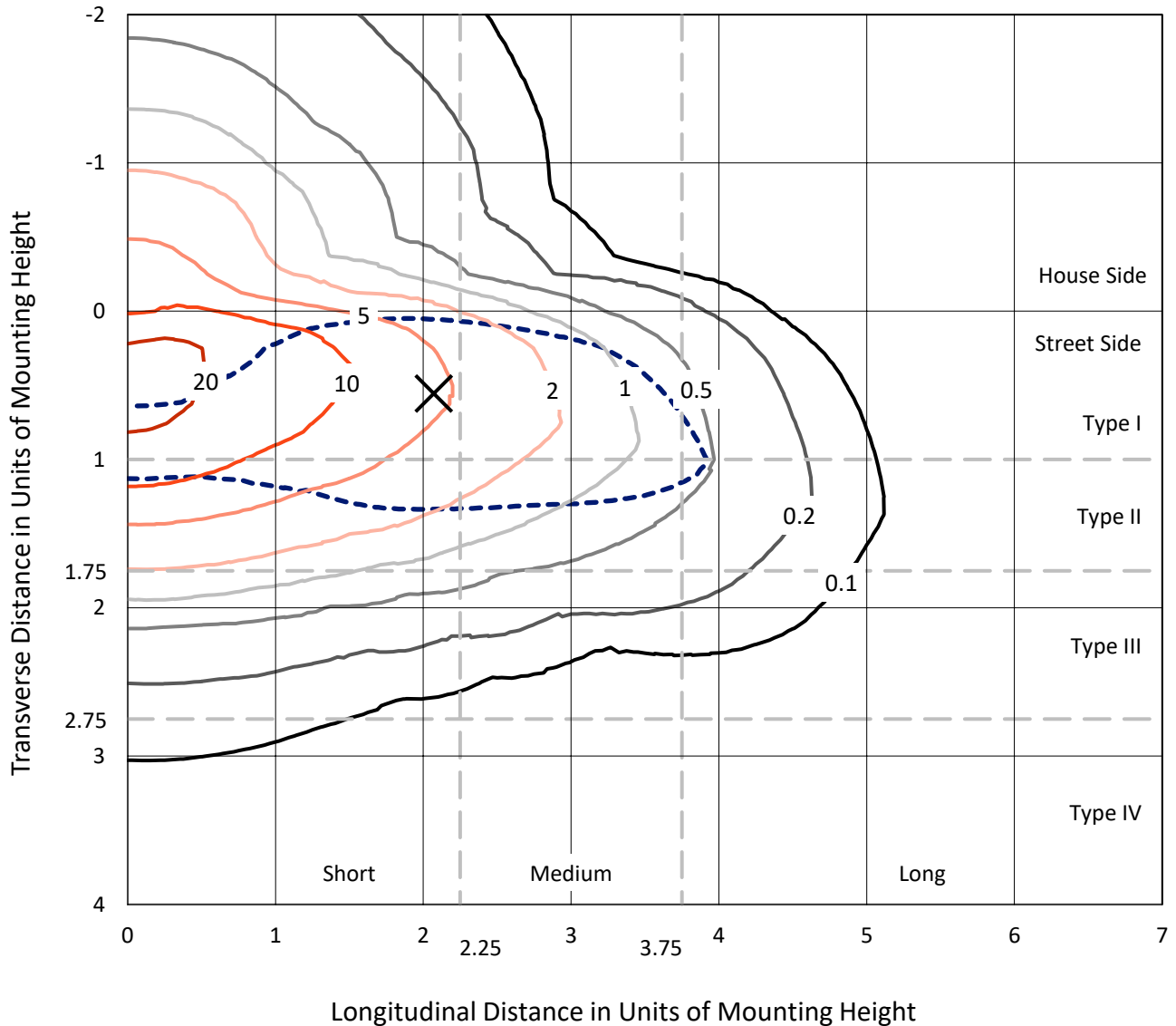
Input Watts (W): 552  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P651639  
 CATALOG NUMBER: GALN-SA9D-840-U-T2R

### Iso-Footcandle Lines of Horizontal Illumination

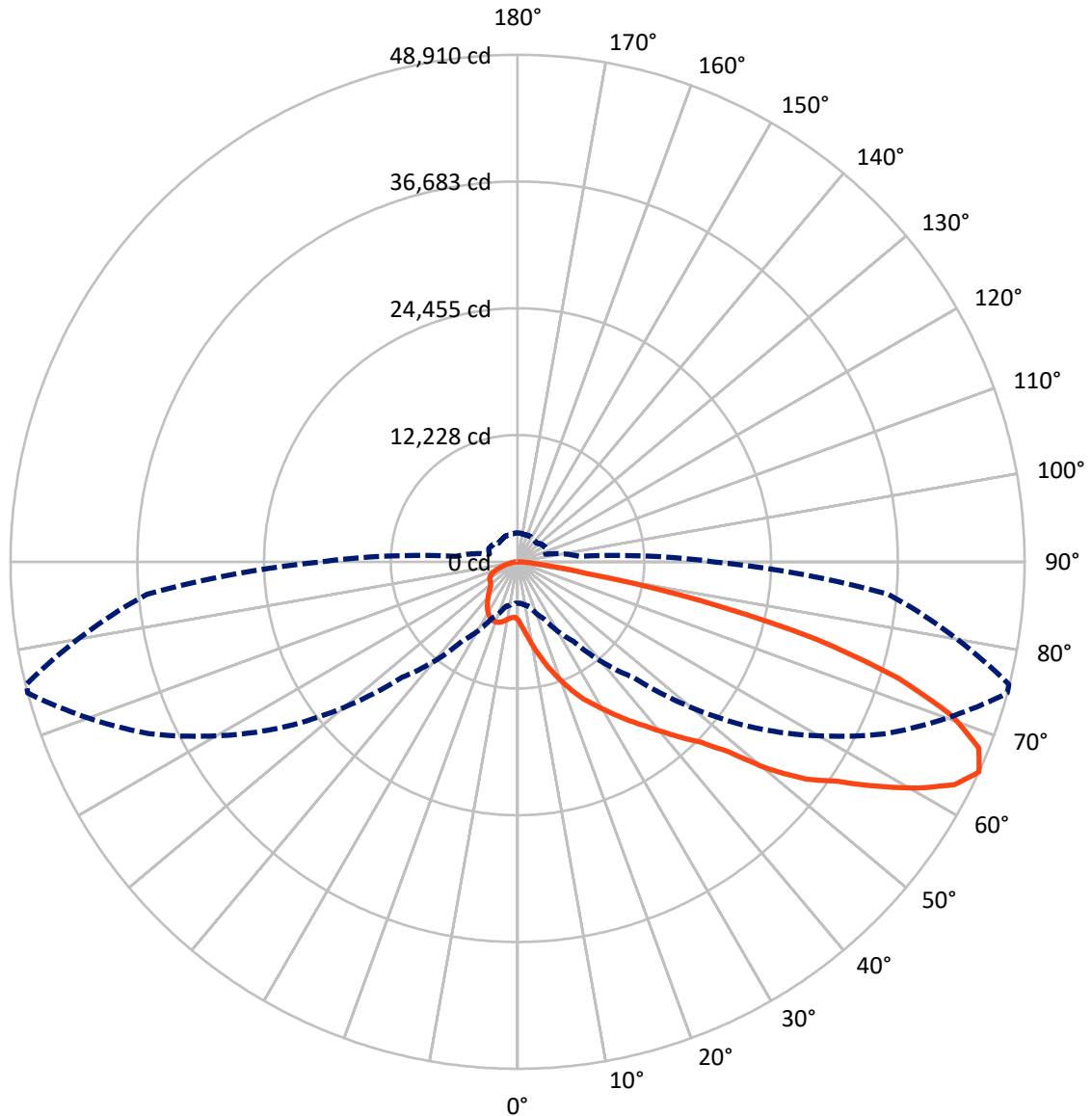
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 23.2 fc  
 Type II - Short - N/A

REPORT NUMBER: P651639  
CATALOG NUMBER: GALN-SA9D-840-U-T2R

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P651639  
 CATALOG NUMBER: GALN-SA9D-840-U-T2R

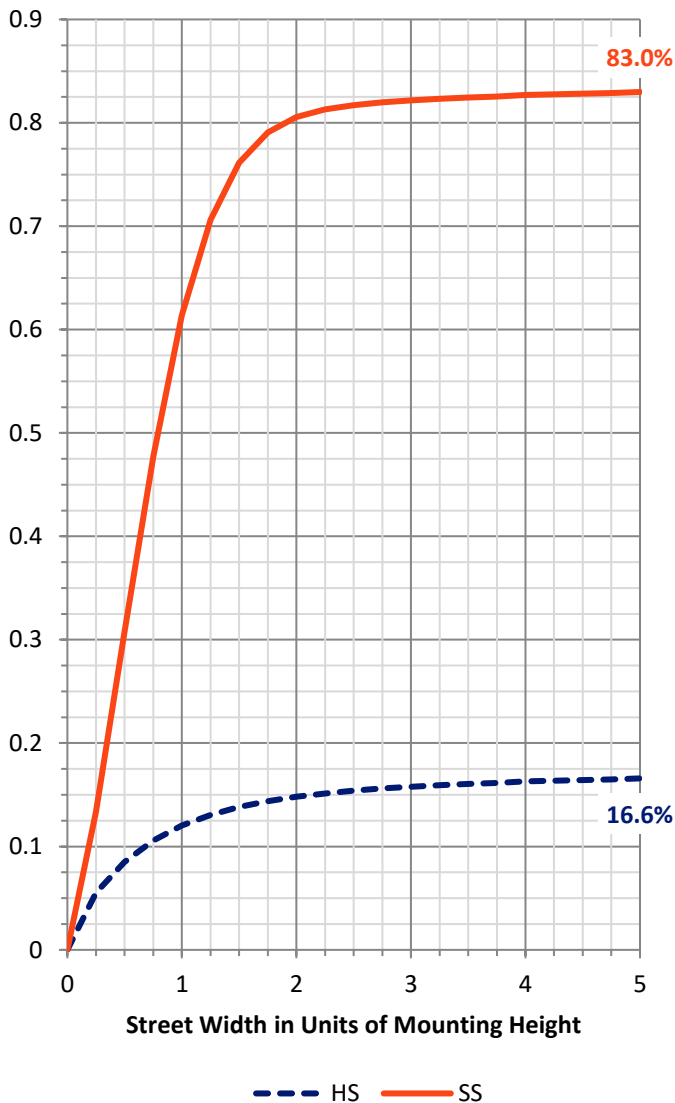
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	10104.9	0.0	10104.9
	% Fixture	16.8	0.0	16.8
<b>Street Side</b>	Lumens	50003.0	0.0	50003.0
	% Fixture	83.2	0.0	83.2
<b>Total</b>	Lumens	60107.9	0.0	60107.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	678.5	1.1
10°-20°	2657.7	4.4
20°-30°	5133.8	8.5
30°-40°	8338.9	13.9
40°-50°	11470.9	19.1
50°-60°	13543.2	22.5
60°-70°	11866.1	19.7
70°-80°	5665.0	9.4
80°-90°	753.8	1.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	60107.9	100.0
0°-180°	60107.9	100.0

**Coefficient of Utilization**

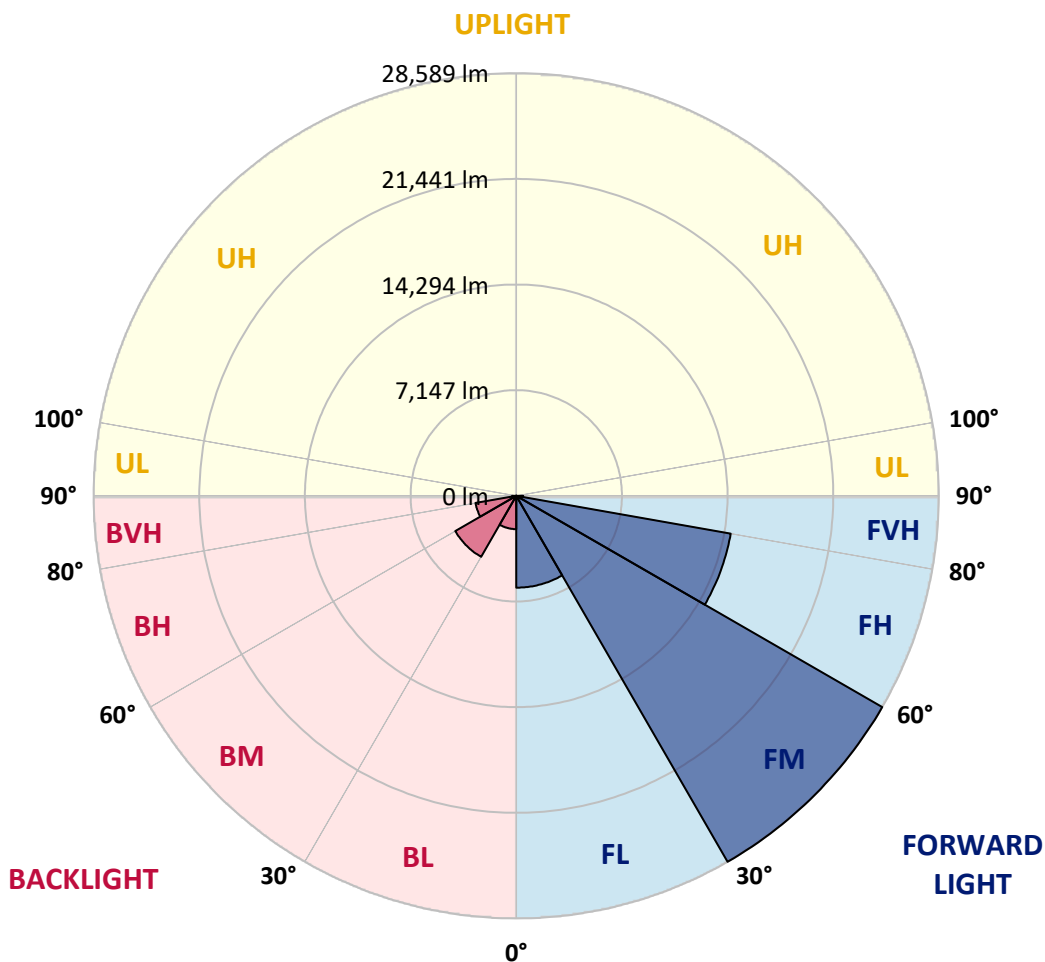


REPORT NUMBER: P651639  
 CATALOG NUMBER: GALN-SA9D-840-U-T2R

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	6214.2	10.3			
FM (30°-60°)	28588.6	47.6			
FH (60°-80°)	14729.1	24.5			G5
FVH (80°-90°)	471.1	0.8			G3/500
BL (0°-30°)	2255.9	3.8	B3/2500		
BM (30°-60°)	4764.4	7.9	B3/5000		
BH (60°-80°)	2801.9	4.7	B4/5000		G4/5000
BVH (80°-90°)	282.7	0.5			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type II Short





REPORT NUMBER: P651639  
 CATALOG NUMBER: GALN-SA9D-840-U-T2R

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8
2.5°	7420.3	7371.4	7319.2	7175.7	7022.5	6849.8	6602.0	6364.0	6047.7	6038.0	5803.2
5°	9477.5	9444.9	9213.4	9079.8	8724.4	8251.6	7850.7	7228.0	6650.9	6582.4	6126.0
7.5°	11368.5	11241.3	11153.3	10912.0	10559.9	9953.5	9177.6	8336.4	7371.4	7280.1	6523.7
10°	12793.2	12780.2	12734.5	12525.9	12261.8	11658.6	10797.9	9591.6	8284.3	8105.0	7006.3
12.5°	13859.3	13869.0	13862.5	13859.3	13670.2	13158.3	12225.9	10954.4	9206.9	9079.8	7563.8
15°	14560.2	14658.0	14697.1	14860.1	14876.4	14534.2	13732.1	12271.5	10246.9	10057.9	8163.7
17.5°	15023.2	15072.1	15254.6	15531.8	15756.7	15694.8	14980.8	13490.9	11309.8	10993.6	8786.3
20°	15466.6	15551.4	15691.5	16069.7	16467.5	16650.0	16148.0	14739.5	12362.8	12160.7	9474.3
22.5°	16389.2	16509.8	16558.8	16751.1	17090.1	17412.9	17184.7	15936.0	13517.0	13243.1	10204.5
25°	17950.9	18078.1	17941.1	17895.5	18006.3	18166.0	18117.2	17064.1	14605.9	14214.7	10895.7
27.5°	19985.3	20001.6	19734.2	19479.9	19206.1	19124.6	18974.6	18065.0	15551.4	15225.3	11590.2
30°	22169.6	22091.4	21648.0	21188.3	20725.4	20268.9	19838.5	19030.0	16604.4	16229.4	12271.5
32.5°	24197.5	24155.1	23662.8	22948.8	22166.3	21736.0	20865.5	20004.8	17732.4	17370.5	12972.5
35°	25716.8	25778.7	25237.5	24458.3	23604.1	23222.7	22123.9	21028.5	18899.6	18505.1	13735.4
37.5°	26795.9	26763.3	26284.0	25609.2	24859.3	24526.8	23594.3	22146.8	20154.8	19776.6	14570.0
40°	27180.6	27161.0	26805.7	26313.4	25837.4	25720.1	25133.2	23353.1	21592.6	21149.1	15574.1
42.5°	26936.1	26978.4	26743.7	26610.1	26522.0	26606.8	26662.2	24934.3	23160.7	22753.2	16663.1
45°	26186.2	26163.4	26130.8	26349.2	26844.8	27402.3	28175.0	26427.5	24865.8	24539.8	18123.6
47.5°	24846.3	25009.3	25090.8	25693.9	26776.3	28096.7	29916.0	28429.2	27340.3	27056.7	20350.4
50°	22971.7	23102.0	23584.6	24657.2	26271.0	28357.5	31617.8	31702.6	31467.8	30936.4	22769.5
52.5°	20044.0	20246.1	21240.5	23206.4	25234.2	28249.9	32648.0	34509.6	34819.3	34421.6	25152.7
55°	16767.4	17051.0	18100.8	20679.7	23806.3	27663.1	33358.8	36136.5	37372.1	37003.7	27448.0
57.5°	13559.4	13859.3	14938.4	17435.8	21315.4	26365.5	33824.9	37949.2	40847.5	40368.3	30303.9
60°	10162.1	10475.2	11401.0	13973.4	17768.3	23829.1	33508.7	39520.6	44319.7	44114.3	33163.2
62.5°	6556.4	6901.9	7707.2	9836.2	13657.2	20363.5	31816.6	40387.8	47325.6	47077.8	35249.7
65°	3993.8	4032.9	4476.3	6106.4	9347.1	15766.5	27946.8	39236.9	48910.1	48835.1	35885.5
67.5°	2582.1	2644.0	2846.2	3658.0	5604.3	10951.2	22345.7	35438.8	47984.2	47958.1	34571.6
70°	2181.1	2200.6	2292.0	2468.0	3256.9	6641.1	15691.5	29384.5	44466.4	44466.4	31412.4
72.5°	1949.6	1975.7	2008.3	2063.7	2324.5	3762.3	9363.4	22873.9	38392.6	38646.9	26737.2
75°	1770.3	1763.8	1783.3	1793.1	1982.2	2458.2	4841.5	16917.4	29700.8	29192.2	19362.6
77.5°	1516.0	1525.8	1516.0	1558.4	1750.7	1871.4	2458.2	11352.2	17999.8	17341.2	9718.8
80°	1245.4	1261.8	1278.0	1304.1	1496.5	1421.5	1476.9	5174.0	6657.4	6517.2	3002.7
82.5°	935.7	958.5	984.6	1046.5	1177.0	939.0	932.4	2210.4	2402.8	2200.6	1105.2
85°	378.2	446.7	674.9	736.8	740.1	515.1	573.8	922.7	981.4	958.5	433.6
87.5°	88.1	104.4	218.4	329.3	303.2	192.3	211.9	299.9	342.3	316.2	146.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P651639  
 CATALOG NUMBER: GALN-SA9D-840-U-T2R

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8	5584.8
2.5°	5695.7	5581.5	5385.9	5236.0	5128.3	5033.8	4975.1	4939.3	4926.2	4923.0	4926.2
5°	5888.0	5685.8	5376.1	5180.6	5072.9	5011.0	4975.1	4971.8	4975.1	4978.4	4968.6
7.5°	6152.1	5861.9	5457.7	5275.1	5193.6	5147.9	5131.6	5125.1	5128.3	5125.1	5125.1
10°	6504.2	6106.4	5617.4	5428.3	5359.9	5307.6	5281.6	5265.2	5252.2	5239.2	5232.7
12.5°	6892.2	6377.1	5790.2	5607.6	5509.8	5428.3	5369.6	5327.2	5297.9	5268.5	5262.1
15°	7325.8	6663.9	5982.5	5728.2	5588.0	5467.4	5366.3	5297.9	5245.7	5203.4	5200.1
17.5°	7739.8	6934.5	6113.0	5783.6	5578.3	5408.7	5275.1	5180.6	5115.3	5059.9	5053.4
20°	8183.2	7192.1	6171.6	5747.8	5480.5	5275.1	5099.0	4984.9	4909.9	4847.9	4838.2
22.5°	8629.8	7410.6	6165.1	5633.7	5310.9	5069.6	4883.9	4763.2	4675.2	4613.2	4590.4
25°	9057.0	7586.6	6083.6	5451.1	5076.2	4825.2	4636.1	4525.2	4447.0	4371.9	4371.9
27.5°	9441.7	7690.9	5930.4	5229.4	4834.9	4570.8	4420.9	4319.8	4248.1	4199.2	4169.8
30°	9819.9	7739.8	5721.7	4949.0	4580.7	4355.7	4235.0	4176.4	4111.1	4055.7	4049.2
32.5°	10158.9	7730.1	5460.9	4675.2	4339.4	4179.6	4130.7	4085.1	4016.6	3938.4	3918.8
35°	10488.2	7664.8	5151.2	4375.2	4137.2	4075.3	4088.4	4023.2	3899.2	3801.4	3785.2
37.5°	10846.8	7547.5	4812.1	4130.7	3967.7	4026.4	4059.0	3915.5	3713.4	3560.2	3524.3
40°	11260.8	7413.8	4460.0	3886.2	3834.0	3980.8	3980.8	3716.6	3439.5	3345.0	3318.9
42.5°	11746.7	7302.9	4166.6	3680.8	3723.2	3869.9	3853.6	3452.6	3338.5	3289.6	3276.5
45°	12516.0	7263.8	3863.4	3501.5	3631.9	3739.5	3605.8	3361.3	3296.1	3256.9	3243.9
47.5°	13732.1	7309.5	3596.0	3367.8	3527.6	3609.1	3328.7	3299.3	3253.7	3198.3	3191.8
50°	14860.1	7267.1	3407.0	3292.9	3436.3	3452.6	3214.6	3224.4	3198.3	3136.3	3123.3
52.5°	15782.8	7133.4	3286.3	3253.7	3358.0	3178.7	3107.0	3142.9	3133.1	3054.8	3041.8
55°	16796.8	7051.9	3227.7	3253.7	3305.9	2940.7	3005.9	3058.1	3045.1	2989.7	2986.4
57.5°	18025.8	7068.2	3185.3	3263.5	3253.7	2820.1	2904.9	2966.8	2963.5	2947.3	2947.3
60°	19284.3	7074.7	3120.0	3260.2	3191.8	2725.6	2800.5	2888.6	2895.1	2904.9	2904.9
62.5°	19701.6	6791.1	2992.9	3201.5	3054.8	2634.3	2702.7	2823.4	2816.8	2842.9	2846.2
65°	18922.4	6005.3	2803.8	3067.9	2878.8	2569.1	2627.8	2738.6	2702.7	2771.2	2784.2
67.5°	17223.8	4968.6	2510.4	2826.6	2683.2	2500.6	2578.8	2621.2	2556.1	2689.7	2693.0
70°	14886.3	3879.7	2138.7	2484.3	2461.4	2428.9	2539.7	2474.6	2383.2	2546.2	2513.7
72.5°	12447.6	2963.5	1708.3	2031.1	2164.8	2321.3	2471.3	2285.4	2158.3	2207.2	2148.5
75°	9350.3	2190.9	1372.6	1591.0	1802.9	2168.1	2409.3	2057.2	1861.6	1816.0	1802.9
77.5°	4766.5	1431.2	1026.9	1190.0	1353.0	1959.4	2324.5	1789.9	1542.1	1470.4	1437.8
80°	1701.8	890.0	723.8	821.6	912.9	1685.5	2031.1	1480.2	1196.5	1183.5	1196.5
82.5°	788.9	573.8	485.8	537.9	541.2	1124.8	1548.6	1105.2	909.6	1382.4	1167.1
85°	339.1	286.9	273.8	267.4	247.8	502.1	870.5	593.3	925.9	414.0	381.5
87.5°	101.1	114.1	101.1	75.0	55.4	55.4	88.1	32.6	22.8	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)